

HUB UNIT FOR PREVENTING THE SPREAD OF VIRUSES,
METHOD AND PROGRAM THEREFOR

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ABSTRACT OF THE DISCLOSURE

10 The invention provides a hub unit that prevents the
spread of viruses in a communications network. A hub unit
connected to a plurality of communication devices, which
controls transmission and reception of data between the
devices, comprises: a first memory unit storing virus
pattern information; a second memory unit temporarily
15 storing data received from any one of the communication
devices; a virus detecting unit that determines whether
the data temporarily stored in the second memory unit is
infected with a virus or not by comparing the virus
patterns stored in the first memory unit with the data
20 temporarily stored in the second memory unit; a virus
spreading preventing unit that disables transmission of
the data outside the hub unit when the detecting unit
determines that the data is infected with a virus; and a
third memory unit storing transmission MAC addresses of
25 the plurality of communication devices connected to the
hub. The virus spreading preventing unit determines
whether or not a transmission address of a communication
device, attached to the data, coincides with an MAC
address stored in the second memory unit, when the
30 detecting unit determines that data is infected with a
virus, and if it determines that there is a coincidence
between the two addresses, it disables transmission of
data to a communication device transmitted the data
infected with a virus and having the same address.